ABSTRACT

Scheduler 304 performs scheduling such that the communication terminal apparatuses to transmit packets to are determined according to the order in CIR information output from demodulator 303, and determines the modulation schemes and coding rates of the packets. Command detector 305 detects an ARQ command transmitted from the communication terminal apparatus determined in scheduler 304, outputs an ACK/NACK signals to buffer 306, and outputs a SUSUPEND signal or a GIVEUP signal to scheduler 304. Scheduler 304 stops retransmission upon receiving a SUSPEND signal or a GIVEUP signal from command detector 305, and redoes the scheduling. Thus, it is possible to improve overall system throughput in a wireless communication system that performs packet transmission.

FIG.1

102 RF RECEIVER

103 DEMODULATOR

104 COMBINER

105 BUFFER

106 ERROR CORRECTION DECODER

107 ERROR DETECTOR

(108) RECEIVING DATA

109 SIR MEASURER

110 SIR DETERMINER

111 COMMAND GENERATOR

112 CIR MEASURER

113 CIR INFORMATION GENERATOR

114 MODULATOR

115 RF TRANSMITTER

FIG.2

PACKET

COMMAND

TIME

FIG.3

PACKET DATA #1 OF PARTNER STATION

PACKET DATA #2 OF PARTNER STATION

PACKET DATA #n OF PARTNER STATION

COMMON CONTROL CHANNEL

302 RF RECEIVER

303 DEMODULATOR

304 SCHEDULER

305 COMMAND DETECTOR

306 BUFFER

307 ERROR CORRECTION ENCODER

308 MODULATOR

309 MODULATOR

310 RF TRANSMITTER

FIG.5

102 RF RECEIVER

103 DEMODULATOR

104 COMBINER

105 BUFFER

106 ERROR CORRECTION DECODER

107 ERROR DETECTOR

(108) RECEIVING DATA

109 SIR MEASURER

110 SIR DETERMINER

112 CIR MEASURER

113 CIR INFORMATION GENERATOR

114 MODULATOR

115 RF TRANSMITTER

501 COMMAND GENERATOR

COUNTING FUNCTION